INVITATION FOR BIDS (IFB) NO. 98-098

ТО

FURNISH, DELIVER, INSTALL, AND MAINTAIN

PARALLEL ENTERPRISE SERVER, ARRAY STORAGE,

OPERATING SYSTEM, DATA AND OPERATING SYSTEM MIGRATION SERVICES

ON A LEASE PURCHASE BASIS

FOR

INFORMATION TECHNOLOGY SERVICES

UNIVERSITY OF HAWAII

HONOLULU, HAWAII

MAY, 1998

BOARD OF REGENTS
UNIVERSITY OF HAWAII
HONOLULU, HAWAII

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IT IS THE RESPONSIBILITY OF ALL BIDDERS TO CHECK THE TABLE OF CONTENTS TO CONFIRM THAT ALL PAGES LISTED THEREIN ARE CONTAINED IN THEIR BID PACKAGE.

BIDDER'S REMINDER:

Tax Clearance Certificate or OPPRM Form 128, CERTIFICATION FOR TAX CLEARANCE, (see Special Provisions).

NOTICE TO BIDDERS

BID FORMS for IFB No. 98-098, Parallel Enterprise Server, Array Storage, Operating System, Data and Operating System Migration Services on a Lease Purchase Basis, will be available from and received in the OFFICE OF PROCUREMENT, PROPERTY AND RISK MANAGEMENT, UNIVERSITY OF HAWAII, 1400 LOWER CAMPUS ROAD, ROOM 15, HONOLULU, HAWAII 96822, (an unofficial copy of the IFB is available on the Internet at http://www.state.hi.us/bids/notice01.htm) and must be submitted no later than 2:30 p.m., May 19, 1998, and at that time will be publicly opened.

Bids received after the time and date fixed for opening will not be considered.

Vendors located outside the Island of Oahu, Hawaii, USA, may request an official copy of the IFB by providing the vendor's name, address, contact person, telephone number, facsimile number, and an account number, billable to the receiver, for express shipment.

Requests may be submitted via facsimile, (808) 956-2093. Direct all questions to Bruce Isaacs, telephone 956-8634.

Kenneth P. Mortimer
President, University of
 Hawaii and Chancellor,
 University of Hawaii at Manoa

Advertised: Honolulu Advertiser

Issue of: May 5, 1998

OPPRM FORM 115 BUSINESS CLASSIFICATION CERTIFICATION STATEMENT

BID FORM

TO

FURNISH, DELIVER, INSTALL, AND MAINTAIN

PARALLEL ENTERPRISE SERVER, ARRAY STORAGE, OPERATING SYSTEM,

DATA AND OPERATING SYSTEM MIGRATION SERVICES

ON A LEASE PURCHASE BASIS

Office of Procurement, Property and Risk Management University of Hawaii 1400 Lower Campus Road, Room 15 Honolulu, Hawaii 96822

To Whom It May Concern:

The undersigned has carefully examined the INVITATION FOR BIDS (IFB) NO. 98-098, TO FURNISH, DELIVER, INSTALL, AND MAINTAIN PARALLEL ENTERPRISE SERVER, ARRAY STORAGE, OPERATING SYSTEM, DATA AND OPERATING SYSTEM MIGRATION SERVICES ON A LEASE PURCHASE BASIS FOR INFORMATION TECHNOLOGY SERVICES, UNIVERSITY OF HAWAII, HONOLULU, HAWAII, and offers to furnish, deliver, install, and maintain the equipment for Information Technology Services, 2565 The Mall, Keller 103, Honolulu, Hawaii 96822, in strict accordance with the true intent and meaning of the Invitation for Bids (IFB) and shall complete delivery and installation within NINETY (90) consecutive calendar days from the date designated in the Notice to Proceed, as follows:

BASIC BID

Furnish, Deliver, Install, and Maintain the following equipment based on a FIVE (5)-year lease purchase plan, with zero down payment, no pre-payment penalty, and with the option to purchase, including trade-in, as follows:

PART 1 - EQUIPMENT REQUIRED

- 3. IBM OS/390 Operating System or approved alternate, as per Technical Specifications.
 Software Product Offered

PART 2 - LEASE COSTS FOR EQUIPMENT AND SOFTWARE

Monthly <u>Lease Cost</u>		No. of Months		Annual Cost
\$	X	12	=	\$(1st year)
\$	X	12	=	\$(2nd year)
\$	Х	12	=	\$(3rd year)
\$	X	12	=	\$(4th year)
\$	X	12	=	\$(5th year)

Part 2, Total Amount for 5-Year Lease = \$______ Prices for Part 2 shall include interest.

PART 3 - MAINTENANCE COSTS

Monthly <u>Maintenance</u>		No. of Months		Annual Cost
\$	X	12	=	\$(1st year)
\$	X	12	=	\$(2nd year)
\$	X	12	=	\$ (3rd year)
\$	X	12	=	\$ (4th year)
\$	X	12	=	\$(5th year)
		a .		4

Part 3, Total Maintenance Costs = \$_____

Prices for Part 3 shall include labor costs, travel time, applicable parts, and all applicable taxes.

PART 4 - FIRST YEAR ADDED COSTS

- 1. Removal and disposal costs of existing \$_____system to be traded in.
- 2. All installation and migration costs, \$______ as per Technical Specifications.
- 3. All Transportation Costs. \$_____

TOTAL AMOUNT, PART 4, Items 1 through 3 = \$

Prices for Part 4 shall include labor costs, travel time, applicable parts, and all applicable taxes.

TOTAL COSTS

TOTAL AMOUNT PART 2 = \$______

TOTAL AMOUNT PART 3 = \$______

TOTAL AMOUNT PART 4 = \$______

Less trade-in for IBM 9121-440 (see (\$_______

Technical Specifications for description)

TOTAL COSTS, PART 2 + 3 + 4 LESS TRADE-IN = \$_____

Bidders must bid on all items in order to be considered for award.

AMORTIZATION SCHEDULE

With its bid, the Contractor shall provide an amortization schedule listing equipment purchase price (showing principal and interest) for each monthly period of the SIXTY (60)-month lease period. There shall be no prepayment penalty if the University purchases the equipment before the end of the SIXTY (60)-month lease period. Title to the equipment shall transfer to the University only if the University exercises the option to purchase, and all amounts have been fully paid.

TAX LIABILITY (for non-lease items)

Both out-of-state and Hawaii bidders are advised that the amount bid on this solicitation is subject to the general excise tax (currently 4%) imposed by Chapter 237, Hawaii Revised Statutes (HRS) and, if tangible property is being imported into the State of Hawaii for resale, the use tax (currently 1/2%) imposed by Chapter 238, HRS. (Refer to Tax Clearance in the Special Provisions and Taxes in the General Provisions.) Bidders are therefore cautioned to consider such taxes in formulating their bids since no adjustments to the prices bid shall be allowed.

BASIS FOR AWARD

The award of contract, if awarded, shall be made to the lowest responsive and responsible bidder on the TOTAL COSTS FOR PART 2, PART 3, AND PART 4, LESS TRADE-IN.

SUBSTITUTIONS TO BE APPROVED IN ADVANCE

The manufacturer and model number are used in the Technical Specifications as a measure of quality, style, appearance, and performance.

Any brand or manufacture of equal or better quality to that specified will be considered for acceptance by the University upon submission of a written request for approval of the proposed substitution with manufacturer's literature or brochures containing technical data on the proposed items being offered.

Proposals for substitutions shall not be submitted unless the bidder has the proposed substitution items available for inspection by the University at the time of submittal of the request. Any requests for substitution of items shall be made at least SEVEN (7) calendar days prior to bid opening to permit inspection by the University, no later than 4:30 p.m., May 12, 1998.

The written request shall be submitted in the attached <u>sample format</u> "Request for Substitution."

The statement of variances must list all features of the proposed substitution which differ from the specifications and/or product specified and must further certify that the substitute has no other variant features.

Bidders shall send requests to the buyer, Bruce Isaacs, Office of Procurement, Property and Risk Management, University of Hawaii, 1400 Lower Campus Road, Room 15, Honolulu, Hawaii 96822.

The University may at its discretion reject or deny any substitution that it deems unequal, and the findings in this regard shall be accepted by the bidders as final and binding.

A bid which includes a substitution shall be considered only if the substitution has been approved in advance by the University.

SAMPLE

		Date:
Office of Procurement, Prand Risk Management University of Hawaii 1400 Lower Campus Road, Filter Honolulu, Hawaii 96822		
To Whom It May Concern:		
Subject	: REQUEST FOR SUBST	ITUTION
In accordance with to clause of the BID section (2) sets of technical browniew and approval for the contract of the contract o	n, I hereby submit for ochures and statement	of variances for your
SPECIFIED ITEM BRAND	SUBSTITUTE OR ALTERNATE BRAND	VARIANT <u>FEATURES</u>
I further certify thitem(s) has no other vari		ostitution of the above
	Signat	ture
	Tit	<u> </u>
	110-	
	OWN LETTERHEAD. NT FEATURE, INDICATE '	"NONE."

NOTE TO BIDDERS

An acceptable bid must conform in all material respects to this Invitation for Bids. Any of the following may be grounds for disqualification:

- 1. Taking exception to any of the specifications, terms or conditions contained in the IFB.
- 2. Placing conditions on the furnishing of solicited goods or services.
- 3. Inclusion of a quotation or order form containing additional specifications, terms or conditions.
- 4. Referencing external documents containing additional specifications, terms or conditions.

Bidders are advised that bids are evaluated as submitted and requests by bidders to delete conditions contained in their bids after bid opening cannot be considered.

<u>CERTIFICATION OF COMPLIANCE (for Part 3 - Maintenance)</u>

The Certification of Compliance with the requirements of Section 103-55, Hawaii Revised Statutes, as specified in General Provision 2.8, Certification of Offeror Concerning Wages, Hours, and Working Conditions of Employees Supplying Services, is enclosed.

In the event that the undersigned is awarded this contract and its remittance address differs from the address shown on page BID - 10, please indicate remittance address below:

Street	Address	or	Ρ.	Ο.	Box	
					_	
City	State		7.	ip (Code	

INFORMATION REQUIRED FROM BIDDER

Bidder is required to furnish the following information as part of the bid. The University reserves the right to reject the bid submitted by any bidder who does not provide complete information, whose performance on other jobs has been unsatisfactory, and who does not demonstrate that they can comply with the terms and conditions of the bid.

1.	Name of Company	
	Street Address	
	City and State	
	Phone Number	
	Fax Number	
	E-Mail Address	(if available)
	World Wide Web Address	(if available)
2.	Name of Account Manager responsible for University account	of Hawaii
3.	References (Firms where similar equipment has been	provided.)
	Name of Firm Address Contact Person	<u>Phone No.</u>
	1)	
	2)	
	3)	
4.	On a separate sheet, list the names of Contractor's based on the Island of Oahu to be utilized to serve University, as described in Technical Specification MAINTENANCE SERVICE AND SUPPORT PERSONNEL.	ice the
TYPE	D NAME OF COMPANY REPRESENTATIVE	
SIGN	ATURE	
TITL	E	
TELE	PHONE	

WAGE CERTIFICATE

SIGNATURE PAGE

CERTIFICATION FOR TAX CLEARANCE

TECHNICAL SPECIFICATIONS

This section indicates the Technical Specifications for the equipment required. The Technical Specifications listed herein are the minimum requirements and are <u>mandatory</u> for an accepted bid.

1. GENERAL INFORMATION

This Invitation for Bids is to solicit offers from vendors to furnish, deliver, install, and maintain an IBM S/390 Parallel Enterprise Server and RAMAC Virtual Array Storage or acceptable alternate, IBM OS/390 operating system or acceptable alternate, and data and operating system migration services on a lease purchase basis.

The equipment is to be installed at Information Technology Services (ITS) computer center located at 2565 The Mall, Keller Hall, Room 103. The main computer room is 1,994 square feet with dimensions of 54 feet by 36 feet, and door clearance dimensions 7 feet high and 42.5 inches wide. Power service available within the installation site is 208 volts, 60 Hz, 3 phase.

This IFB may refer to IBM's mainframe computers by model type and features. The University of Hawaii uses these models and features as a basis for referencing those device types and characteristics that are supported by the MVS/ESA operating system currently operational on the installed IBM mainframe. This reference does not constitute a bias towards these devices but a recognition that all devices attached to the University's mainframe computer must be supported devices of the current MVS/ESA operating system and the planned OS/390 operating system under which they must function.

2. GENERAL TECHNICAL REQUIREMENTS

All hardware, software and their general respective features shall be stated, and shall be generally available from the vendor submitting the bid.

All hardware shall be newly manufactured; used equipment is not acceptable.

The proposed equipment shall replace the department's existing IBM 9121-440 computer system and shall be totally compatible with all the equipment listed as currently installed at Information Technology Services. "Totally compatible" shall mean that the continued operation and use of the current equipment does not require any modification of its software or hardware. The equipment and software currently installed are as follows:

- a. Equipment currently installed:
 - 1 9121-440 ES/9000 Processor
 - 1 9032-002 ES/9000 Enterprise System Connection Dir.
 - 2 3990-G03 Storage Controllers
 - 1 3990-J03 Storage Controller
 - 2 3390-A28 Direct Access Storage Devices
 - 1 3390-A38 Direct Access Storage Device
 - 3 3390-B2C Direct Access Storage Devices
 - 2 3390-B3C Direct Access Storage Devices
 - 1 3803-002 Tape Control Unit
 - 2 3420-008 Magnetic Tape Drives
 - 1 3490-A20 Tape Cartridge Device
 - 2 3490-B40 Tape Cartridge Devices
 - 2 3490-C2A Tape Cartridge Devices
 - 1 3494-D10 Tape Library Data Server
 - 1 3494-L10 Tape Library Data Server
 - 1 3494-S10 Tape Library Data Server 1 3725-002 Communications Control Unit
 - 1 3727-700 3725 Communications Control Unit Console
 - 5 3174-01L Subsystem Control Units
 - 1 3174-22L Subsystem Control Unit
 - 1 3274-D31 Control Unit
 - 4 3274-D41 Control Units
 - 1 3825-001 Page Printer
 - 1 3130-02D Advanced Function Printer
 - 2 6262-014 Impact Line Printers
 - 2 3287-002 System Output Printers
- b. Machine configuration of current IBM 9121-440 to be replaced and traded in.

Mach-Mdl-Serial	<u>Feat</u>	Qty.	<u>Description</u>
9121-440-20720	1940	1 1	9121 ES/9000 PROCESSOR 128 TO 512MB MEMORY
	2010	1	TOTAL STG CAP 512MB
	2100	1	I/O POWER SEQUENCE CON
	2110	1	I/O POWER SEQ CON EXP FR
	2710	1	1ST VECTOR FACILITY
	3401	1	1ST PARALLEL CHNL EXP FRAME
	3504	1	PARALLEL CHNNL GR 4TH
	3505	1	PARALLEL CHNNL GP 5TH
	3506	1	PARALLEL CHNNL GP 6TH
	3555	1	ENTRY PARALLEL CHNL GP
	3600	1	ESCON SER CHNL BASEFRAME
	3700	1	ESCON CHNL GRP 1ST
	3701	1	ESCON CHNL GRP 2ND
	3702	1	ESCON CHNL GRP 3RD
	3703	1	ESCON CHNL GRP 4TH
	3704	1	ESCON CHNL GRP 5TH
	3705	1	ESCON CHNL GRP 6TH
	6000	1	EXPANSION FRAME

Mach-Mdl-Serial	<u>Feat</u>	Qty.	<u>Description</u> (continued)
	8K1733 9063 9110 9120 9700	1 1 1 1	REMOTE POWER CONTROL ON/OFF CLASSIC BLUE 5853/00E ORDERED 4201 PROPRINTER ATTACHED 110V/120V

c. Software currently installed:

<u>Software</u>	<u>Release</u>	<u>Vendor</u>
MVS/ESA Assembler H BTLS C/370 CICS/ESA DFDSS DFHMS DFP DFSORT EREP GDDM HL Assembler JES2 ICKDSF IMS.DB tools VSAMZAP ISPF/PDF OS/VS COBOL Overly Gen. Lang./370 PL/1 Compiler & Libr. PSF/MVS RACF REXX.370 RMF SDSF SMP/E TCP/IP TSO/E VS COBOL II VTAM/ESA CICS Manager MainView Manager Intertest Panvalet	4.2.2 2.1.0 1.1 2.1.0 3.2.1 2.5.0 2.6.0 3.3.1 1.13.0 3.5 2.3.0 1.1.0 4.2.0 1.16 2.2.0 3.3.0 2.4.0 1.1.0 2.2.0 1.1.0 2.2.0 1.1.0 2.2.0 1.1.0 2.2.0 1.1.0 2.2.0 1.1.1.0 2.3.0 2.4.0 1.1.0 2.2.0 1.1.0 2.3.0 2.4.0 1.1.0 2.3.0 2.4.0 1.1.0 2.2.2 4.2.2 4.2.2 1.3.3 1.8.1 3.1.0 2.3.1 1.3.2 3.4.2 3.4.2 3.4.1 2.2.1 5.2 1.3.2 3.4.2 3.4.2 3.4.2 3.4.2 3.4.1 3.5 3.6 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	IBM
Panvalet/ISPF NC-ACCESS	14.2 2.2.15 &	Computer Associates CKS NA
NC-PASS	3.0.0 2.0.1 & 2.0.3	CKS NA
EDA/SQL FATS/FATAR FDR	2.2 & 3.2 4.3.6 5.2.5	Information Builders Innovation Innovation

<u>Software</u>	<u>Release</u>	<u>Vendor</u> (continued)
DRS VMCF VPS VPSPRINT CEMT/Batch MXG Oasis Zeke	3.2.032 6.2.028 6.2.205 6.1.018 5.0 13.14 1.2.2 4.0.0C & 4.2	Levi, Ray and Shoup Levi, Ray and Shoup Levi, Ray and Shoup Levi, Ray and Shoup MacKinney Systems Merril Consultants Platinum Technology Platinum Technology
Zack SAS	3.2 6.08	Platinum Technology SAS Institute SPSS
SPSS ADABAS	5.2.2 & 6.1.2	Software AG
ADABAS Online Services	5.2.2 & 6.1.2	Software AG
NATURAL	2.2.5 & 2.2.8	Software AG
NATURAL Security	2.2.5 & 2.2.8	Software AG
NATURAL Connection	2.2.5 & 2.2.8	Software AG
NATURAL Adv Facilities	2.2.5 & 2.2.8	Software AG
NATURAL Construct	3.3.1 & 3.3.2	Software AG
PREDICT	3.2.3 & 3.3.2	Software AG
PREDICT Appl. Control ENTIRE System Server	1.3.1 2.1.1 & 2.1.2	Software AG Software AG
ENTIRE Net-Work ENTIRE Net-Work TCP/IP Auditre LumeNAT Trim Securitre	5.3.1 5.3.1 1.2.1 1.1.0 5.X.3 & 6 2.2.2	Software AG Software AG Treehouse Software Treehouse Software Treehouse Software Treehouse Software

3. <u>HARDWARE REQUIREMENTS</u>

a. IBM 9672-RA5 Parallel Enterprise Server or acceptable alternate with the following minimum configuration:

Feature Code	Description	Qty.
9672-RA5	S390 G4 SERVER RA5 1 WAY PROCESSOR	1
0012	CEC AIRFLOW R1/2/3 MDLS	19
0018	CHANNEL DRIVER CD R2/3 MDLS	6
0023	TOKEN RING ADAPTER (W/#0041)	1
0041	HW MANAGEMENT CONSOLE WITH RSF	1
0050	CEC CAGE	1

Feature Code (continued)	<u>Description</u>	Qty.
0711 0800	RA5 1 WAY PROCESSOR CRYPTO CDMF	1
2020	I/O EXPANSION CAGE	1
2303	3 PORT PARALLEL CD R2/3 MDLS	4
2313	ESCON CHANNEL CD	6
2337	FIBB CARD SINGLE WIDE	3
3256	256MB MEMORY CARD	4
5208	OSA2 FAST ETHERNET	2
6090	SML CONSOLE DISPLAY	1
8887	4.8 US, NON-CHI R2/3 C02/3	1
9930	NORTHERN HEMISPHERE	1
9961	SERV TOOL KIT	1

b. IBM 9393-T82 RAMAC Virtual Array Storage and associated software or acceptable alternate with the following minimum configuration:

<u>Feature Code</u>	<u>Description</u>	Qty.
9393-T82 0711 2002	RAMAC VIRTUAL ARRAY STORAGE 2048MB EFFECTIVE CACHE 290GB EFFECTIVE CAPACITY	1 1 1
4000 9903	8 ESCON PORTS POWER 60HZ	1
5648-A17 4010 5802 5822 9001	EXTENDED FACILITIES PROD V2R1 BASIC MLC MVS 18-TRACK 3480 CARTRIDGE MVS ENV MRM 3480 CART ASSET REGISTRATION	1 1 1 1

c. Contractor shall provide a qualified installation planning representative to configure, propose, and validate power requirements and power features required for the proposed mainframe and storage systems and provide guidance to the University on power related issues. The power requirements of the proposed equipment must be the minimum possible and the total power requirements of the proposed equipment shall not exceed 13 KVA.

4. SOFTWARE REQUIREMENTS

IBM OS/390 operating system or acceptable alternate with the following included in the base:

<u>Product Code</u>	<u>Description</u>
5645-001	OS/390 Base Function - MVS/ESA SP-JES2 - DFSMS (DFP)

<u>Product Code</u> <u>Description</u> (continued)

- VTAM (TM) with AnyNet/MVS
- TCP/IP
- TSO/E
- ISPF
- SMP/E
- LE/MVS
- High Level Assembler
- GDDM (TM)
- BookManager (R) READ
- SystemView for MVS Base
- SOMobjects for MVS (Runtime Library)
- SOMobjects for MVS (Service Classes)
- VisualLift RTE
- DFSMS/MVS (NFS Feature)
- LANRES/MVS
- LAN SERVER for MVS
- OSA Support Facility
- OpenEdition DCE Base Ser.
- OpenEdition DCE Dist. File (DFS)
- OpenEdition MVS Services
- OpenEdition MVS Debugger
- OpenEdition MVS Shell & Util.
- ICKDSF
- ESCON Director Support
- Bulk Data Transfer (BDT)
- EREP/MVS
- MICR/OCR Support
- TIOC
- HCD
- Internet Connection Server for MVS/ESA

Contractor shall provide migration services to migrate current MVS/ESA V4.2.2 to OS/390. The migration services shall include but not be limited to:

- a. Technical review of current environment and project plan.
- b. Non-IBM software research.
- c. Build OS/390 system customized for current I/O definitions and system parameters.
- d. Apply latest fixes to customized system.
- e. Install OS/390 and assist in migration issues from current MVS.
- f. Post installation support.

5. MAINFRAME INSTALLATION

Mainframe installation shall be coordinated by the Contractor with a planning specialist from the manufacturer.

A floor diagram of the current proposed layout shall be provided by the Contractor.

A power profile which includes environmental requirements and electrical requirements including but not limited to KVA requirements and electrical connector requirements shall be provided by the Contractor.

The Contractor shall be responsible for any electrical upgrades necessary to power incoming hardware. Any additional electrical outlets or changes to pre-existing electrical outlets are the responsibility of the Contractor to accomodate the proposed equipment. All electrical work must be performed by a licensed contractor in the State of Hawaii and must possess a valid electrical contractor (C-13) classification in compliance with Chapter 444, Hawaii Revise Statutes, and the rules and regulations of the Contractor's License Board, Department of Commerce and Consumer Affairs.

Contractor shall ensure that qualified personnel perform the following activities including but not limited to:

- a. Unpack, position new system, and dispose of packing materials.
- b. Run all installation tests, verify and certify system.
- c. Configure IOCP.
- d. Swing interface cables from current to new system.
- e. Discontinue current system, de-cable, pack and remove from premises.

6. STORAGE INSTALLATION AND MIGRATION

The Contractor shall develop an installation and data migration plan with input from systems and operations staff. The installation and data migration plan shall be completed TWO (2) weeks prior to the installation and data migration date.

The Contractor shall assist in data migration from 3390 DASD to new array system by working with systems and operations staff and providing consultation and guidance in the execution of the data migration plan. Necessary re-configuration of data center to accommodate new array system shall be performed by the Contractor in coordination with systems and operations staff.

The Contractor shall unpack, remove packing materials off premises, position and install new array system.

The Contractor shall perform power on, initialization, diagnostic and certification of new array system.

The Contractor shall remove all current 3990 disk controllers and 3390 DASD displaced by new array system.

The Contractor shall coordinate, contract and install necessary electrical power requirements for the new array system.

7. HARDWARE MAINTENANCE REQUIREMENTS

- a. Hardware Maintenance Service
 - 1) Hardware maintenance service shall include FIVE (5) years of system warranty/maintenance.
 - 2) Hardware maintenance service shall consist of preventive maintenance and on-call remedial maintenance. All maintenance service shall be prompt and effective and shall be performed by engineers trained, experienced, and qualified to work on manufacturer's equipment.
 - 3) The Contractor shall perform maintenance service that will keep the equipment in optimum operating condition and perform repairs that will restore the equipment to working order. All maintenance and repairs shall be in accordance with manufacturer's guidelines, instructions, manuals, standards, and procedures. The Contractor will test and repair equipment at the University's installation site.
 - 4) Preventive maintenance shall be based on the specific needs of individual equipment and shall also include on-call remedial maintenance. Contractor shall furnish all labor, tools, equipment, parts, transportation and supervision required for maintenance service of equipment. Maintenance shall include lubrication, adjustments, and replacement of worn or malfunctioning parts, all as deemed necessary in accordance with manufacturer's guidelines, instructions, manuals, standards, and procedures.
 - 5) Maintenance parts shall be only original manufacturer's parts, either new or equivalent to new in performance and function.

b. Maintenance Service Period

The maintenance period of coverage required shall be TWENTY-FOUR (24) hours a day, SEVEN (7) days a week, including State-observed holidays.

c. Response Time

- 1) Prompt response to requests for maintenance service is mandatory. Contractor shall provide a telephone number to receive trouble calls and to provide a current status of calls referred for service. The telephone line must be open and be able to handle callers 24 hours per day, every day of the year. This telephone line shall be available at no charge to the University.
- 2) Telephone acknowledgment of all requests for service shall be made within TWENTY (20) minutes from the time the service request is made. On-site response time shall be within TWO (2) hours after a service call is placed.

d. Parts Availability

It is vital to the University that an adequate parts inventory be maintained locally by the Contractor in order to effectively repair equipment in the most expeditious manner. The Contractor shall ensure that an adequate local spare and repair parts inventory will be maintained for all the equipment under the contract. This parts inventory must be stored geographically on the island of Oahu.

The Contractor shall allow the University to inspect their local inventory storage facility on a regular basis upon TWO (2) days notification. The visits shall include, but shall not be limited to, inspection and review of stock records, and inspection of physical stock inventory.

In the event that a failing component, assembly, or part is not available from the local parts inventory, the Contractor shall be required to ship the replacement component or part to Hawaii and deliver it to the University within TWENTY-FOUR (24) hours after identification for replacement. In the event that equipment is inoperative, or Contractor estimates equipment to be inoperative, for more that TWENTY-FOUR (24) hours due to equipment failure, the Contractor shall take one or more of the following actions at no additional cost to the University and subject to the University's approval:

- 1) Provide backup equipment;
- 2) Provide on-site personnel for thorough analysis of the problem; and

3) Provide replacement for the failing equipment.

When the system is operational but not fully functional, replacement of the failing component, assembly, or part must be at the University within TWENTY-FOUR (24) hours of identifying the need for replacement or repair.

The University will be the sole judge in determining if the system is not operational, or is operational but not fully functional. In all cases, Contractor shall provide equipment in the manner described herein.

e. Diagnostic Tools and Test Equipment

The University requires that all special diagnostic tools and test equipment designated by the manufacturer as necessary to detect, isolate, and correct equipment malfunctions be made available at the local service office or installation site.

The University also requires the Contractor to provide a remote support system that will provide the customer engineer with the capability to remotely access error logs, system status, and run diagnostic tests.

The equipment shall have the capability to diagnose internal hardware failures and contact a remote hardware maintenance facility to report the problem, identify the failing component, and request dispatch of a customer engineer without University intervention. This facility must have the option to first request authorization before contacting the remote hardware maintenance facility.

The equipment shall provide a facility from which a remotely located customer engineer is capable of assisting a local customer engineer in problem determination. In particular, the facility shall permit the remotely located customer engineer to run diagnostic routines, display hardware status indicators, correct microcode faults, and interact with the local customer engineer.

The equipment shall further provide the remote customer engineer with the capability to transmit corrective microcode maintenance from the remote site directly into the equipment and apply such maintenance to correct hardware problems.

f. Hierarchy of Support for On-Site Repair

The University recognizes that complex maintenance problems will occur which require service resources beyond that available at the local level. It then becomes mandatory that the Contractor have access to and make available to the

University at no extra charge, hierarchies of support to quickly elevate difficult problems and resolve these complex equipment malfunctions.

- 1) <u>Initial Level Technical Support</u>. The Customer Engineer that normally responds to customer's call for maintenance service. This individual must be trained to work on the equipment for which he/she is called upon for maintenance service.
- 2) Second Level Technical Support. A specialist with additional training and/or experience who specializes in providing diagnostic assistance and/or repair expertise when a service call is particularly difficult. This individual must have at least THREE (3) years of experience as Second Level Technical Support in the maintenance and repair of the equipment provided and is normally recognized by the employer for his/her skills by job title or pay classification.
- Third Level Support. A Specialist whose geographical responsibilities are regional and/or national in scope. This specialist has received in-depth specialized training on subject equipment and/or experience beyond the second level technical support specialist on the specific equipment types requiring maintenance attention, and specializes in providing diagnostic assistance and consultation to assist in unusually complex problems. This individual must have at least THREE (3) years of experience as Third Level Support in the maintenance and repair of the equipment provided and is normally recognized by the employer for his/her skills by job title or pay classification.

When equipment fails or becomes inoperative, maintenance service shall be provided as follows. After Contractor's initial service personnel arrive at the University's installation site to respond to a remedial maintenance call and the equipment malfunction has not been diagnosed and repair initiated within TWO (2) hours of the time of arrival of the service personnel, the Contractor will dispatch for second level technical support. In the event that FOUR (4) additional hours elapse from the time of response at the second level of technical support and the equipment malfunction has not been diagnosed and repair initiated, the Contractor will dispatch for third level technical support.

8. ADDITIONAL SUPPORT SERVICES

In order for the University to effectively control its computer system resources, the Contractor shall provide technical guidance and assistance in:

- a. Installation planning assistance and advice including physical environment and site preparation, configuration assistance, and installation coordination to minimize system and equipment service outages and reduce the disruption of normal data center operations.
- b. Direct support in the installation, testing, and implementation of the Contractor's public domain and proprietary software required for file conversion, installation, and operation. This shall include the availability of back-up technical assistance to resolve problems encountered in using the delivered software, serve as an information resource concerning the installation and use of software, and provide quick access to back-up assistance by the contractor either on site or by other qualified personnel by telephone.

This assistance shall be provided on site and without limitations as to hours on an ongoing basis for the entire contract period.

9. MAINTENANCE SERVICE AND SUPPORT PERSONNEL

The Contractor shall have the following full-time staff of on-duty support personnel based on the Island of Oahu to service the University:

- a. Minimum of FOUR (4) Customer Engineers, each of whom must have a minimum of THREE (3) years experience repairing mainframe and related subsystems, system installation and de-installation, and problem determination and resolution.
- b. ONE (1) Installation Planning Specialist, with THREE (3) years experience in machine placement and room layout, electrical requirements, cooling requirements, environmental factors, and new system installations.
- c. ONE (1) Programming Support Specialist, with THREE (3) years experience in problem determination by analysis and diagnosis of traces, error logs and dumps, and management of PTFs, hipers and fixes.
- d. ONE (1) Systems Management Specialist, with THREE (3) years experience in education of system, problem management, change management, system management, and operating system issues.

The bidder shall provide the names, titles, and years of experience for the above individuals.

10. TRAINING

On-site training will be necessary for operations and system software personnel in equipment operation, and problem tracing and determination. The Contractor shall be prepared to conduct

training within THREE (3) weeks of a request by the University at the University's site.

- a. Operator Training The purpose is to provide operations personnel with at least TWO (2), two-hour sessions per shift (for three shifts) of extensive hands-on training in the operational use of the proposed equipment.
- b. Systems Programmer Training The purpose is to provide group sessions with extensive training for systems software personnel in DASD file migration, performance optimization, system generation, and system configuration. Follow-up sessions shall also include tuning and data recovery and be provided within TWO (2) weeks of request.

11. REFERENCES

The bidder shall provide the University with the names, addresses, contact persons, and telephone numbers of at least THREE (3) companies for which the bidder has installed the proposed or similar equipment. References may be asked about their related hardware and software installation and migration experience.

All questions pertaining to the Technical Specifications shall be directed to Al Higashi, telephone (808) 956-7195.

Bidders are cautioned to review the Technical Specifications carefully and thoroughly. Objections to or requests for clarification of the specifications shall be made in writing in accordance with the General Provisions to the Office of Procurement, Property and Risk Management prior to the submittal of a bid. The submittal of a bid shall be considered as acceptance of the specifications as published.

SPECIAL PROVISIONS

1. SCOPE

The Furnishing, Delivering, Installing, and Maintaining of Parallel Enterprise Server, Array Storage, Operating System, Data and Operating System Migration Services on a lease purchase basis for Information Technology Services, University of Hawaii, Honolulu, Hawaii shall be in accordance with the terms and conditions of IFB No. 98-098 and the General Provisions dated February 23, 1996 included by reference. Copies of the General Provisions are available at the Office of Procurement, Property and Risk Management, University of Hawaii, 1400 Lower Campus Road, Room 15, Honolulu, Hawaii 96822 or the General Provisions may be viewed at: http://www.state.hi.us/bids/notice03.htm

2. TECHNICAL REPRESENTATIVE OF THE PROCUREMENT OFFICER (TRPO)

The Technical Representative of the Procurement Officer is Al Higashi, Assistant Director, telephone (808) 956-7195.

3. <u>SITE INSPECTION</u>

Each bidder shall visit the site and examine the conditions of same and be aware or satisfied as to physical condition and environment in relation to the terms and conditions of the bid specifications. No additional allowance will be granted because of lack of knowledge of such conditions. Bidders shall arrange for an appointment by calling the Technical Representative on any normal working day, Monday through Friday, after 9:00 a.m. but not later than 4:00 p.m.

4. REMOVAL, DELIVERY, INSTALLATION, AND ACCEPTANCE OF EQUIPMENT

Prior to removal, delivery, and installation, the Contractor shall contact the Technical Representative to coordinate the required work.

Contractor shall deliver and install the hardware and software in accordance with manufacturer's instructions within NINETY (90) consecutive calendar days from the date designated in the Notice to Proceed. The equipment will not be accepted and no charges shall be paid by the University until the equipment has successfully met the University's Acceptance Test as specified below.

In addition to the above requirements, during the installation procedures, the Contractor shall perform all other diagnostic routines normally run on a system of this nature and turn the equipment over to the University in good working order which shall be defined as operating in accordance with manufacturer's specifications. The Contractor shall certify in writing to the

University that the equipment has been properly installed in accordance with manufacturer's specifications and ready for use.

The Acceptance Test Period shall begin on the date designated by the University following notification that the installation is complete and shall end when the equipment has satisfactorily passed the University's acceptance test as defined herein by operating in conformance with the manufacturer's published performance specifications and capabilities and Program Documentation. The University shall complete its acceptance of the equipment within THIRTY (30) calendar days provided the equipment performs to specifications.

The University's acceptance test is the operation of its normal production workload for a period of THIRTY (30) calendar days without error.

Equipment shall not be accepted by the University and no charges will be paid by the University until the equipment has satisfactorily passed the acceptance test.

Upon successful completion of the Acceptance Test Period, the University shall notify the Contractor in writing of the University's acceptance of the installed equipment and authorize payments as provided herein.

5. MANUALS AND INSTRUCTIONS

The Contractor shall provide the University with operating and maintenance manuals of the equipment furnished under this contract.

6. TERM OF CONTRACT

- a. It is the intent of the University to lease the equipment on a lease-purchase plan in accordance with Chapter 37D, Hawaii Revised Statutes, covering a period of FIVE (5) years with no pre-payment penalty for accelerated payments or early completion of payments in full. Should additional funds become available, the interest may be reamortized at the option of the University, and the payments and, if necessary, the terms shall be adjusted accordingly. The University may terminate the contract in the event of nonavailability of funds in accordance with Chapter 37D, Hawaii Revised Statutes.
- b. In accordance with Chapter 37D, Hawaii Revised Statutes, it shall be strictly understood that the contract shall be enforceable only to the extent that funds have been certified as available and that the availability of funds in excess of the amount certified as available shall be contingent upon future appropriations.

7. PAYMENT

For the lease-purchase portion, the Contractor shall be remunerated monthly in advance, upon submission of a properly executed original invoice and ONE (1) copy, indicating the contract number, to Information Technology Services, Administrative Services, 2425 Campus Road, Sinclair Library 10, Honolulu, Hawaii 96822.

For the maintenance service, the Contractor shall be remunerated monthly in advance, upon submission of a properly executed original invoice and ONE (1) copy, indicating the contract number. The invoice for the maintenance fee shall be sent to the address indicated above.

8. TITLE AND RISK OF LOSS OR DAMAGE

While on a lease basis, the equipment shall remain the exclusive property of the Contractor who shall bear any loss or damage to the equipment while in transit or in the possession of the University.

9. <u>CHANGES TO EQUIPMENT</u>

The University shall not make any changes or modifications to the equipment without the prior written consent of the Contractor. All changes or modifications to the equipment which cannot be removed without materially damaging the functional capabilities or economic value of the equipment, shall become a part of the equipment.

10. LIQUIDATED DAMAGES

Time being an essential part of this contract, in case of failure on the part of the Contractor to complete the delivery and installation within the time specified and agreed upon, liquidated damages per calendar day shall be ONE-HUNDRED DOLLARS (\$100.00) for each day's delay after the date agreed upon. The findings of the University shall be accepted by the parties hereto as final; but, any allowance of time and remission of charges shall, in no other manner, affect the rights and obligations of the parties under this contract.

11. WARRANTY

The equipment furnished shall be new and as specified. The Contractor shall warrant that all workmanship and materials of equipment furnished under this contract shall be guaranteed for a minimum period of ONE (1) year from the date of acceptance. The Contractor shall replace and/or repair any defective workmanship and/or materials at no cost to the University during the period of warranty, provided such defects are not due to abuse or negligence on the part of the University.

12. SOFTWARE LICENSE AGREEMENTS

The University will execute Software License Agreements acceptable to the University, if necessary, as long as the terms and conditions of the License Agreements do not conflict with the terms and conditions of this Invitation for Bids. The University shall be protected from claims of copyright infringement not occasioned by University modification of the software.

13. COMPLIANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES

Computer equipment furnished herein must comply with the requirements (technical standard, labelling, emission limitations, etc.), FCC Class B certification as stated in the Federal Communications Commission Rules.

14. SOFTWARE WARRANTY

In the event the software is not compatible with Licensees' computing equipment or does not perform as warranted by the manufacturer, Licensee reserves the right to return the software and request a refund therefor.

15. INSURANCE (for Maintenance Service)

Contractor shall maintain insurance acceptable to the University in full force and effect throughout the term of this contract. The policy or policies of insurance maintained by Contractor shall provide Combined Single Limit Coverage (bodily injury and property damage) in the amount of \$1,000,000 per occurrence.

Insurance shall be in force the first day of the term of this contract.

Each insurance policy required by this contract shall not be cancelled, limited in scope of coverage or non-renewed until after THIRTY (30) days' written notice has been given to the University of Hawaii, Director of Office of Procurement, Property and Risk Management.

Contractor agrees to deposit with University, on or before the effective date of this contract, certificates of insurance necessary to satisfy the University that the insurance requirements of this contract have been complied with and to keep such insurance in effect and the certificates therefor on deposit with the University during the entire term of this contract.

The University shall retain the right at any time to review the coverage, form, and amount of the insurance required hereby. If in the opinion of the University, the insurance provisions in this contract do not provide adequate protection for the University, the University may require Contractor to obtain insurance sufficient in coverage, form, and amount to provide

adequate protection. The University's requirements shall be reasonable but shall be designed to assure protection from and against the kind and extent of the risks which exist at the time a change in insurance is required.

The University shall notify Contractor in writing of changes in the insurance requirements; and if Contractor does not deposit copies of acceptable insurance policies with the University incorporating such changes within SIXTY (60) days of receipt of such notice, this contract shall be in default without further notice to Contractor and the University shall be entitled to all legal remedies.

The procuring of such required policy or policies of insurance shall not be construed to limit Contractor's liability hereunder nor to fulfill the indemnification provisions and requirements of this contract. Notwithstanding said policy or policies of insurance, Contractor shall be obligated for the full and total amount of any damage, injury, or loss arising from its acts or omissions with respect to this contract.

16. TAX CLEARANCE FOR CONTRACTS

In accordance with Section 103-53, HRS, bidders shall submit with their bid packages, <u>original</u> tax clearances from the State of Hawaii Department of Taxation and the Internal Revenue Service. In the event bidders are unable to obtain a tax clearance by mail in time to include it with their bid packages, bidders may submit a completed OPPRM Form 128, CERTIFICATION FOR TAX CLEARANCE, in place of the DOTAX Form A-6, with their bid packages. However, an original tax clearance must be provided before contract award. Tax clearances obtained shall certify that all tax returns due have been filed, and all taxes, interest, and penalties levied or accrued under the provisions of Title 14 that are administered by the State of Hawaii Department of Taxation and under the Internal Revenue Code against the bidder, have been paid. This shall apply to all contracts, whether with Hawaii bidders, out-of-state bidders, or nonprofit organizations.

This shall not apply to bidders if the State of Hawaii Department of Taxation certifies that the bidder is in good standing under a plan in which delinquent taxes are being paid to the State of Hawaii Department of Taxation (and the Internal Revenue Service, if applicable) in installments.

Offers that are not accompanied by original tax clearances or OPPRM Form 128, CERTIFICATION FOR TAX CLEARANCE, may be considered as non-responsive and may be rejected.

Any questions pertaining to tax clearances may be addressed to the following:

- a. Internal Revenue Service, Compliance Division LTC 300 Ala Moana Boulevard, #50089
 Honolulu, Hawaii 96850-4922
 Telephone No.: (808) 541-1160
- Department of Taxation
 State of Hawaii
 Oahu District Office
 P.O. Box 259
 Honolulu, Hawaii 96808-0259
 Telephone No.: (808) 587-4242
 Toll-Free: 1-800-222-3229

17. TAX CLEARANCE FOR FINAL PAYMENT

General Provision 7.2 entitled <u>Tax Clearance</u>, is hereby deleted and shall be replaced by the following:

TAX CLEARANCE FOR FINAL PAYMENT

In accordance with Section 103-53, HRS, final payment for the settlement of the contract will not be made by the University until the Contractor has submitted to the University <u>original</u> tax clearances from the State of Hawaii Department of Taxation and the Internal Revenue Service. Tax clearance shall certify that all tax returns due have been filed, and all taxes, interest, and penalties levied or accrued under the provisions of Title 14 that are administered by the State of Hawaii Department of Taxation and under the Internal Revenue Code against the Contractor have been paid.

Notwithstanding Sections 40-57 and 40-58, HRS, if a Contractor fails to provide the original tax clearances within SIX (6) months of the notice of final settlement or completion date of the contract, the University shall assign the final settlement payment in an amount not to exceed the tax liability to the State of Hawaii Department of Taxation or Internal Revenue Service, provided that the State of Hawaii Department of Taxation may first offset its tax debt against the sum owed to the Contractor. This shall apply to all contracts whether with Hawaii vendors, out-of-state vendors, or nonprofit organizations.

The foregoing shall not apply to the Contractor if the State of Hawaii Department of Taxation certifies that the Contractor is in good standing under a plan in which delinquent taxes are being paid to the State of Hawaii Department of Taxation (and the Internal Revenue Service, if applicable) in installments.

Any questions pertaining to tax clearances may be addressed to the following:

- a. Internal Revenue Service, Compliance Division LTC 300 Ala Moana Boulevard, #50089
 Honolulu, Hawaii 96850-4922
 Telephone No.: (808) 541-1160
- b. Department of Taxation
 State of Hawaii
 Oahu District Office
 P.O. Box 259
 Honolulu, Hawaii 96808-0259
 Telephone No.: (808) 587-4242
 Toll-Free: 1-800-222-3229

18. <u>LEASE AGREEMENT</u>

Upon award, the attached Lease Agreement shall be executed by the parties and shall be incorporated into the contract between the successful Contractor and the University of Hawaii.

LEASE AGREEMENT